



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/806,845

03/23/2004

Brian Boesch

2924-001

2487

22208 7590 11/18/2005

ROBERTS ABOKHAIR & MARDULA
SUITE 1000
11800 SUNRISE VALLEY DRIVE
RESTON, VA 20191

EXAMINER

CASCA, FRED A

ART UNIT

PAPER NUMBER

2687

DATE MAILED: 11/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/806,845	Applicant(s) BOESCH, BRIAN	
	Examiner Fred A. Casca	Art Unit 2687	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Action is in response to Applicant's amendments filed on August 22, 2005. Claims 1-32 are pending in the present application. **This Action is Final.**

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 25-28, and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Elliot, U.S. Patent No. 6,243,039 B1.

Referring to claim 25, Elliot discloses a method for locating wireless devices on an ad hoc network (FIG. 1, abstract, and col. 4, lines 52-60, "system that tracks . . . monitor the location of a child", note that the relation between the wireless devices (device worn by a child and the central receiver transmitter) is a peer-to-peer relationship (without any centralized server placed between them), hence the network is an ad hoc network) comprising creating a identifier for a wireless device (col. 5, lines 1-60, "the device 12 transmits its data signal when triggered by an internal timer", it is inherent that the device 12 is an identifier so that the corresponding signals are recognized by the central control system, hence an identifier was created for the device 12), establishing a location rule for the wireless device (col. 3, lines 22-65, "notification of authorities", "a pre-specified threshold of movement", note that a notification is sent out to the parent in case the device exceeds a pre-specified threshold, hence a location rule (threshold

Art Unit: 2687

movement) is established), receiving location data from the wireless device (FIG. 1, FIG. 3, col. 5, line 1 through col. 6, line 36, “The device 12 transmits its data signal when triggered by an internal timer on a periodic basis. This is useful for providing a historical record of the location of the device”, “central control system 20”, “Data from the device 12 via the central receiver-transmitter 16 is received by a central control system’s data receiving module”), determining whether the wireless device is in violation of the location rule, and in the event the wireless device is in violation of the location rule, reporting the location of the wireless device to at least one other wireless device on the ad hoc network (col. 3, lines 23-63, “auto-notification to a monitoring party”, “a pre-specified threshold”, “city boundary”, “notification of a parent”, “other specified receiver”, note that at least one other wireless device on the ad hoc network is (e.g., the central receiver-transmitter) is notified in the event the wireless device is in violation of the location rule (e.g., exceeding a pre-specified threshold), hence, the method determines whether the wireless device is in violation of the location rule so that it could notify another wireless device when the rule is violated).

Referring to claim 26, Elliot discloses the method for locating a wireless device on an ad hoc network of claim 25, wherein establishing a location rule for the wireless device comprises establishing a proximity threshold relative to a perimeter boundary (abstract, and col. 3, lines 22-56, “auto-notification to monitoring party, when the device movement exceeds a pre-specified threshold. The pre-specified threshold may be a minimum change in a location, a movement outside a designated range, or a movement beyond a certain distal radius. The designated range may be specified in terms of a zip code or a city boundary”).

Referring to claim 27, Elliot discloses the method for locating a wireless device on an ad hoc network of claim 26, wherein establishing a proximity threshold relative to a perimeter boundary comprises establishing a proximity threshold relative to an egress perimeter boundary that defines an area from which a wireless device may not depart (col. 3, lines 22-56, “a process of auto-notification to a monitoring party, when the device movement exceeds a pre-specified threshold. The pre-specified threshold may be a minimum change in a location, a movement outside a designated range, or a movement beyond a certain distal radius”, note that egress perimeter boundary is disclosed such that the wireless device may not depart (when the device movement exceeds a pre-specified threshold)).

Referring to claim 28, Elliot discloses the method for locating a wireless device on an ad hoc network of claim 26, wherein establishing a proximity threshold relative to a perimeter boundary comprises establishing a proximity threshold relative to ingress perimeter boundary that defines an area into which a wireless device may not enter (col. 3, lines 22-56, “a process of auto-notification to a monitoring party, when the device movement exceeds a pre-specified threshold. The pre-specified threshold may be a minimum change in a location, a movement outside a designated range, or a movement beyond a certain distal radius”, note that an ingress perimeter boundary is disclosed such that the wireless device may not enter (when the device movement exceeds a pre-specified threshold)).

Referring to claim 31, Elliot discloses a method for locating a monitored unit on an ad hoc network (FIG. 1, abstract, and col. 4, lines 52-60, “system that tracks . . . monitor the location of a child”, note that the relation between the wireless devices (device worn by a child

and the central receiver transmitter) is a peer-to-peer relationship (without any centralized server placed between them), hence the network is an ad hoc network) comprising:

creating an identifier for a monitored unit (col. 5, lines 1-60, “the device 12 transmits its data signal when triggered by an internal timer”, it is inherent that the device 12 is an identifier so that the corresponding signals are recognized by the central control system, hence an identifier was created for the device 12);

establishing a location rule for the monitored unit (col. 3, lines 22-65, “notification of authorities”, “a pre-specified threshold of movement”, note that a notification is sent out to the parent in case the device exceeds a pre-specified threshold, hence a location rule (threshold movement) is established);

receiving location data from the monitored unit (FIG. 1, FIG. 3, col. 5, line 1 through col. 6, line 36, “The device 12 transmits its data signal when triggered by an internal timer on a periodic basis. This is useful for providing a historical record of the location of the device”, “central control system 20”, “Data from the device 12 via the central receiver-transmitter 16 is received by a central control system’s data receiving module”);

determining whether the monitored unit is in violation of the location rule; and

in the event the monitored unit is in violation of the location rule, reporting the location of the monitored unit to at least one other monitored unit on the ad hoc network (col. 3, lines 23-63, “auto-notification to a monitoring party”, “a pre-specified threshold”, “city boundary”, “notification of a parent”, “other specified receiver”, note that at least one other wireless device on the ad hoc network is (e.g., the central receiver-transmitter) is notified in the event the wireless device is in violation of the location rule (e.g., exceeding a pre-specified threshold),

hence, the method determines whether the wireless device is in violation of the location rule so that it could notify another wireless device when the rule is violated).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6243039 B1, Elliot in view of U.S. Patent No. 5,557,259, Musa.

Referring to claim 29, Elliot discloses the method locating a wireless device on an ad hoc network of claim 25. Elliot does not specifically disclose the method locating a wireless device on an ad hoc network of claim 25, wherein establishing a location rule for the wireless device comprises **establishing a proximity threshold relative to another wireless device** on the ad hoc network.

In the same field of endeavor, Musa discloses a system to monitor the proximity of a subject under surveillance, wherein it comprises a proximity threshold between a transmitter and a receiver (abstract, and col. 1, line 48-66, "A proximity alert and direction indicator is provided that allows an observer to monitor the proximity of a subject under surveillance, particularly a child. The subject wears a transmitter removeably attached to the shoe. The observer wears a receiver-containing bracelet. The receiver contains a proximity detector with threshold set that emits an audible sound when the distance between the subject sand the observer exceeds some preset distance").

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the method of Elliot by providing establishing a location rule for the wireless device of Elliot to comprise establishing a proximity threshold relative to another wireless device, as suggested by Musa, on the ad hoc network of Elliot, motivation being for the purpose of allowing the method to know the distance between the two wireless devices, and also to prevent the wandering away of the wireless devices from each other (e.g., if the first device is attached to a child and the second device is attached to a parent, the parent could be kept aware of the separation distance between them and a proximity threshold would alert them to be aware of their proximity and take appropriate action).

Referring to claim 30, the combination of Elliot/Musa disclose the method for locating a wireless device on an ad hoc network of claim 29, and inherently disclose establishing a proximity threshold relative to another wireless device on the ad hoc network comprises establishing a maximum allowable separation threshold between the wireless device and the another wireless device on the ad hoc network (Musa, abstract, and col. 1, line 48-66, "A proximity alert and direction indicator is provided that allows an observer to monitor the proximity of a subject under surveillance, particularly a child. The subject wears a transmitter removeably attached to the shoe. The observer wears a receiver-containing bracelet. The receiver contains a proximity detector with threshold set that emits an audible sound when the distance between the subject sand the observer exceeds some preset distance", note that a proximity detector with threshold is set and it emits a sound when the distance between the transmitter and the receiver exceeds inherently a maximum allowable separation threshold (some

Art Unit: 2687

preset distance). Further note that a threshold value inherently has a value, which sets a boundary for the maximum allowable value).

6. Claims 1-8, 11-24 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,243,039 B1, Elliot in view of U.S. Patent No. 6,100,806 Gaukel.

Referring to claim 1, Elliot discloses a system for locating a member of a group (abstract, “system that tracks . . . monitor the location of a child”), wherein each member of the group comprises a wireless device equipped with location means (col.2, lines 27-46, and col. 4, lines 35-65, “a device worn or carried . . . by a person”, “The device 20 receives broadcast signals from each of three GPS satellites”, note that the device is inherently wireless so that it receives broadcast signals), the system comprising the wireless device (FIG. 1, col. 4, lines 35-65, “The device 12 receives broadcast signals from each of three GPS satellites”, note that the device is inherently wireless in order to receives broadcast signals), wherein the wireless device is accessible via a wireless network (FIG. 1, and col. 4, line 52 through col. 5, line 59, “The data signal transmitted by the device 12 generally includes the current GPS coordinates”, “The central receiver-transmitter 16 that receives the transmission from the device”, note that the device 12 receives signals from the network and also transmits signals to the network, hence it is accessible via a wireless network), and a server accessible via the wireless network (FIG. 1, FIG. 3, col. 5, line 19 through col. 6, line 36, “central control system 20”, “Data from the device 12 via the central receiver-transmitter 16 is received by a central control system’s data receiving module”), the server adapted to receive location data from a first wireless device (FIG. 1, FIG. 3, col. 5, line 1 through col. 6, line 36, “The device 12 transmits its data signal when triggered by an internal timer on a periodic basis. This is useful for providing a historical record of the location of the

device”, “central control system 20”, “Data from the device 12 via the central receiver-transmitter 16 is received by a central control system’s data receiving module”).

Elliot does not disclose a system for locating a member of a group, wherein each member of the group comprises a wireless device equipped with location means, the system comprising the wireless device is accessible via a wireless network, and a server accessible via the wireless network, the server adapted to receive location data from a first wireless device, **establish a location rule for the first wireless device, determine whether the first wireless device is in violation of the location rule established for the first wireless device, and in the event the first wireless device is in violation of the location rule established for the first wireless device, report the location of the first wireless device to the first wireless device.**

Elliot’s system provides call center services that may provide location information to a parent. It may also provide other actions in case of an emergency, such as the notification of authorities, or the notification of a parent in the case where a device exceeds a pre-specified threshold of movement.

In the same field of endeavor, Gaukel discloses an apparatus and method for electronic monitoring and tracking of individuals, which comprises a central control tracking station, and the central control tracking station establish a location rule for the first wireless device (col. 14, lines 8-60, “various rules of compliance parameters for geographical limits on inclusion zones and exclusion zones . . . uploaded from the central control tracking station 40”), determine whether the first wireless device is in violation of the location rule established for the first wireless device (col. 14, lines 8-60, “position violation”, “alarm signal upon the violation of any rule of compliance. This alarm signal is immediately transmitted to the central control tracing

Art Unit: 2687

station 40, for further processing”, note that an alarm is triggered when a predetermined rule is violated, hence the method determines whether the wireless device is in violation of the location rule established for the wireless device), and in the event the first wireless device is in violation of the location rule established for the first wireless device, report the location of the first wireless device to the first wireless device (FIG. 2, col. 15, lines 16-61, and col. 19, lines 28-58, “Lamp 82 may be provided to alert the monitored person to an alert condition such as position violation”, “Upon crossing of the boundary of exclusion zone 66, remote unit 30 will immediately transmit a “violation” signal shown by arrow”, “The non-compliance violation is immediately processed at central control station 40 and transmitted to work station 92 at customer location 90, so that the customer is immediately notified of the violation”, note that the first wireless device (customer) is notified, and inherently the location of the customer is report along with the violation report).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Elliot by providing the server of the system of Elliot to establish a location rule for the first wireless device, determine whether the first wireless device is in violation of the location rule established for the first wireless device, and in the event the first wireless device is in violation of the location rule established for the first wireless device, report the location of the first wireless device to the first wireless device, as suggested by Gaukel, motivation being for the purpose of monitoring and controlling the mobility of the first wireless device by letting the first wireless device know that it is in violation so that the first wireless device could correct its position, or to send help or a control agent to find the first wireless device and prevent an undesired situation (e.g., if the first wireless device is attached to

a child, it would be very beneficial to alert the child of violation in order to prevent the child from wandering away).

Referring to claim 2, the combination of Elliot/Gaukel disclose the system of claim 1 (as rejected above), and further disclose the system further comprises a second wireless device (Elliot, FIG. 1, and col. 4, line 52 through col. 5, line 12, “central receiver-transmitter 16”, “The central receive-transmitter 16 may be any type of cellular transmission system . . . or a two-way paging also known as an interactive paging”).

Referring to claim 3, the combination of Elliot/Gaukel disclose the system of claim 1, and further disclose the wireless device is a cell phone (Elliot, col. 4, line 52 through col. 6, line 17, “cellular communication device”, “cellular transmission system”, note that cellular phone (cellular communication device) and the cellular transmission system is used in electronic monitoring and tracking of the individuals).

Referring to claim 4, the combination of Elliot/Gaukel disclose the system of claim 3, and further disclose the wireless network is a cell phone network (Elliot, col. 4, line 52 through col. 6, line 17, “cellular communication device”, “cellular transmission system”, “cellular transmission system, such as that used for analog cellular telephone services or digital cellular telephone services”, note that a cell phone network (cellular transmission system) is used).

Referring to claim 5, the combination of Elliot/Gaukel disclose the system of claim 1, and further disclose the location means comprises a GPS chip adapted to acquire and process a GPS signal (Elliot, col. 5, line 47 through col. 6, line 67, “GPS device which is to be worn or carried in some manner by the person to be monitored”, note that a GPS chip (GPS device) is used to acquire and process GPS signal).

Referring to claim 6, the combination of Elliot/Gaukel disclose the system of claim 1, and further disclose the location rule comprises a proximity threshold relative to a perimeter boundary (Elliot, abstract, and col. 3, lines 22-56, “auto-notification to monitoring party, when the device movement exceeds a pre-specified threshold. The pre-specified threshold may be a minimum change in a location, a movement outside a designated range, or a movement beyond a certain distal radius. The designated range may be specified in terms of a zip code or a city boundary”).

Referring to claim 7, the combination of Elliot/Gaukel disclose the system of claim 6, and further disclose the perimeter boundary is an egress perimeter boundary that defines an area from which the wireless device may not depart (Elliot, col. 3, lines 22-56, “a process of auto-notification to a monitoring party, when the device movement exceeds a pre-specified threshold. The pre-specified threshold may be a minimum change in a location, a movement outside a designated range, or a movement beyond a certain distal radius”, note that egress perimeter boundary is disclosed such that the wireless device may not depart (when the device movement exceeds a pre-specified threshold)).

Referring to claim 8, the combination of Elliot/Gaukel disclose the system of claim 6, wherein the perimeter boundary is an ingress perimeter boundary that defines an area into which the wireless device may not enter (Elliot, col. 3, lines 22-56, “a process of auto-notification to a monitoring party, when the device movement exceeds a pre-specified threshold. The pre-specified threshold may be a minimum change in a location, a movement outside a designated range, or a movement beyond a certain distal radius”, note that an ingress perimeter boundary is

disclosed such that the wireless device may not enter (when the device movement exceeds a pre-specified threshold)).

Referring to claim 11, the combination of Elliot/Gaukel disclose the system of claim 2, and further disclose the second wireless device is a designated group leader (Elliot, FIG. 1, col. 4, line 52 through col. 5, line 59, “The central receiver-transmitter 16”, “The central receiver-transmitter 16 that receives the transmission from the device forwards the data signal to a centralized control system 20”, note that the second wireless device (The central receiver-transmitter 16) is a designated group leader).

Referring to claim 12, the combination of Elliot/Gaukel disclose the system of claim 11, and inherently disclose the server is located on the group leader (Elliot, FIG. 1, and col. 4, line 52 through col. 5, line 60, “the central receiver-transmitter 16”, “central control system”, note that the server communicates with the second wireless device (the central receiver-transmitter 16), and further note that the server (central control system) may reside on a single computer, or on multiple computers in a distributed computing environment. Hence it is inherent for the server to reside on the group leader, which is also the second wireless device so that the group leader could set location rules and control the first wireless device (e.g., a parent as a group leader having the capabilities of the server could set threshold boundaries for his child).

Referring to claim 13. Elliot discloses a system for locating a member of a group relative to a perimeter boundary (abstract, “a system that tracks . . . locations of a . . . person”, “monitors the location of a child”, “auto-notification of a device’s movement that exceeds a pre-specified threshold”, “proximity alert device”, note that a pre-specified threshold is defined and the system includes the capability to function as a proximity alert device, hence the system locates a

Art Unit: 2687

member of a group relative to a perimeter boundary) comprising the group comprising at least a first member and a second member each comprising a wireless device equipped with location means (FIG. 1, “device worn by a child”, “central receive transmitter”, col.2, lines 27-46, and col. 4, line 35 through col. 6 line 65, 17, “a device worn or carried . . . by a person”, “The device 20 receives broadcast signals from each of three GPS satellites”, note that a first wireless device (the device 12) and a second wireless device (the central receiver-transmitter 16) are used. Further note that the first and the second devices are inherently wireless so that broadcast signals are transmitted and received), wherein the wireless device is accessible via a wireless network (FIG. 1, and col. 4, line 52 through col. 5, line 59, “The data signal transmitted by the device 12 generally includes the current GPS coordinates”, “The central receiver-transmitter 16 that receives the transmission from the device”, note that the device 12 receives signals from the network and also transmits signals to the network, hence it is accessible via a wireless network), and a server accessible via the wireless network (FIG. 1, FIG. 3, col. 5, line 19 through col. 6, line 36, “central control system 20”, “Data from the device 12 via the central receiver-transmitter 16 is received by a central control system’s data receiving module”), the server adapted to receive location data from the first member wireless device (FIG. 1, FIG. 3, col. 5, line 1 through col. 6, line 36, “The device 12 transmits its data signal when triggered by an internal timer on a periodic basis. This is useful for providing a historical record of the location of the device”, “central control system 20”, “Data from the device 12 via the central receiver-transmitter 16 is received by a central control system’s data receiving module”).

Elliot does not disclose a system a system for locating a member of a group relative to a perimeter boundary comprising a server accessible via the wireless network, the server adapted

to determine the location the first member wireless device relative to a perimeter boundary, determine whether the first member wireless device is within a proximity threshold of the perimeter boundary, and in the event that the first member wireless device is within the proximity threshold of the perimeter boundary, report the location of the first member wireless device to at least the second member wireless device.

Elliot's system provides call center services that may provide location information to a parent. It may also provide other actions in case of an emergency, such as the notification of authorities, or the notification of a parent in the case where a device exceeds a pre-specified threshold of movement. Elliot's system also discloses a process of auto-notification of a device's movement that exceeds a pre-specified threshold, and includes a capability to function as a proximity alert device.

In the same field of endeavor, Gaukel discloses an apparatus and method for electronic monitoring and tracking of individuals, which comprises a central control tracking station, and the central control tracking station establish a location rule for the first wireless device (col. 14, lines 8-60, "various rules of compliance parameters for geographical limits on inclusion zones and exclusion zones . . . uploaded from the central control tracking station 40", note that rules of compliance for geographical limits on inclusion and exclusion are used in the monitoring and tracking system, hence the system determines the location the wireless device relative to a perimeter boundary), determine whether the first member wireless device is within a proximity threshold of the perimeter boundary (col. 14, lines 8-60, "position violation", "alarm signal upon the violation of any rule of compliance. This alarm signal is immediately transmitted to the central control tracing station 40, for further processing", note that an alarm is triggered when a

Art Unit: 2687

predetermined rule is violated, hence the method determines whether the first member wireless device is within a proximity threshold of the perimeter boundary), and in the event that the first member wireless device is within the proximity threshold of the perimeter boundary, report the location of the first member wireless device to at least the second member wireless device (FIG. 2, col. 15, lines 16-61, and col. 19, lines 28-58, “Lamp 82 may be provided to alert the monitored person to an alert condition such as position violation”, “Upon crossing of the boundary of exclusion zone 66, remote unit 30 will immediately transmit a “violation” signal shown by arrow”, “The non-compliance violation is immediately processed at central control station 40 and transmitted to work station 92 at customer location 90, so that the customer is immediately notified of the violation”, note that the first wireless device (customer) is notified, and inherently the location of the customer is report along with the violation report. Hence, in the event that the first member wireless device is within the proximity threshold of the perimeter boundary, the location of the first member wireless device is reported).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Elliot by providing the server of the system of Elliot to establish a location rule for the first wireless device relative to a perimeter boundary, determine whether the first wireless device is within a proximity threshold of the perimeter boundary, and in the event the first wireless device is within a proximity threshold of the perimeter boundary, report the location of the first wireless device to at least the second member wireless device, as suggested by Elliot/Gaukel, motivation being for the purpose of monitoring and controlling the mobility of the first wireless device by letting the first wireless device know that it is in violation so that the first wireless device could correct its position, or to send help or a control agent to

find the first wireless device and prevent an undesired situation (e.g., if the first wireless device is attached to a child, it would be very beneficial to alert the parent of violation in order to prevent the child from wandering away).

Referring to claim 14, the combination of Elliot/Gaukel disclose the system of claim 13, and further disclose the wireless device is a cell phone (Elliot, col. 4, line 52 through col. 6, line 17, “cellular communication device”, “cellular transmission system”, note that cellular phone (cellular communication device) and the cellular transmission system is used in electronic monitoring and tracking of the individuals).

Referring to claim 15, the combination of Elliot/Gaukel disclose the system of claim 14, and further disclose the wireless network is a cell phone network (Elliot, col. 4, line 52 through col. 6, line 17, “cellular communication device”, “cellular transmission system”, “cellular transmission system, such as that used for analog cellular telephone services or digital cellular telephone services”, note that a cell phone network (cellular transmission system) is used).

Referring to claim 16, the combination of Elliot/Gaukel disclose the system of claim 13, and further disclose each of the location means comprises a GPS chip set adapted to acquire and process a GPS signal (Elliot, col. 5, line 40 through col. 6, line 67, “GPS device which is to be worn or carried in some manner by the person to be monitored”, “The central control system 20 . . . receives the transmission from the device, and translates the GPS coordinates”, note that a GPS chip set is adapted so that each of the location means process a GPS signal).

Referring to claim 17, the combination of Elliot/Gaukel disclose the system of claim 13, and further disclose the perimeter boundary is an egress perimeter boundary that defines an area from which the wireless device may not depart (Elliot, abstract, and col. 3, lines 22-56, “auto-

notification to monitoring party, when the device movement exceeds a pre-specified threshold. The pre-specified threshold may be a minimum change in a location, a movement outside a designated range, or a movement beyond a certain distal radius. The designated range may be specified in terms of a zip code or a city boundary”, “a process of auto-notification to a monitoring party, when the device movement exceeds a pre-specified threshold. The pre-specified threshold may be a minimum change in a location, a movement outside a designated range, or a movement beyond a certain distal radius”, note that egress perimeter boundary is disclosed such that the wireless device may not depart (when the device movement exceeds a pre-specified threshold)).

Referring to claim 18, the combination of Elliot/Gaukel disclose the system of claim 13, and further disclose the perimeter boundary is an ingress perimeter boundary that defines an area into which the wireless device may not enter (Elliot, col. 3, lines 22-56, “a process of auto-notification to a monitoring party, when the device movement exceeds a pre-specified threshold. The pre-specified threshold may be a minimum change in a location, a movement outside a designated range, or a movement beyond a certain distal radius”, note that an ingress perimeter boundary is disclosed such that the wireless device may not enter (when the device movement exceeds a pre-specified threshold)).

Referring to claim 19, the combination of Elliot/Gaukel disclose the system of claim 13, and inherently disclose the server is located on the second member wireless device (Elliot, FIG. 1, and col. 4, line 52 through col. 5, line 60, “the central receiver-transmitter 16”, “central control system”, note that the server communicates with the second wireless device (the central receiver-transmitter 16), and further note that the server (central control system) may reside on a single

computer, or on multiple computers in a distributed computing environment. Hence it is inherent for the server to reside on the second member wireless device so that the second member wireless device could set location rules and control the first wireless device (e.g., a parent as a group leader having the capabilities of the server could set threshold boundaries for his child).

Referring to claim 20, Elliot discloses a system for locating members of a group (abstract, “system that tracks . . . monitor the location of a child”) comprising the group comprising a plurality of wireless devices (FIG. 1, “device worn by a child”, “central receive transmitter”, “Global Positioning System satellite”, col.2, lines 27-46, and col. 4, line 35 through col. 6 line 65, 17, “a device worn or carried . . . by a person”, “The device 20 receives broadcast signals from each of three GPS satellites”, note that a plurality of wireless devices (the device 12, and the central receiver-transmitter 16, global positioning system satellite) are used. Further note that the plurality of wireless devices are inherently wireless so that broadcast signals are transmitted and received), and a server accessible via a wireless network (FIG. 1, FIG. 3, col. 5, line 19 through col. 6, line 36, “central control system 20”, “Data from the device 12 via the central receiver-transmitter 16 is received by a central control system’s data receiving module”), the server adapted to receive location data from a wireless device (FIG. 1, FIG. 3, col. 5, line 1 through col. 6, line 36, “The device 12 transmits its data signal when triggered by an internal timer on a periodic basis. This is useful for providing a historical record of the location of the device”, “central control system 20”, “Data from the device 12 via the central receiver-transmitter 16 is received by a central control system’s data receiving module”), determine the location of the wireless device relative to the location of the plurality of wireless devices (col. 5, lines 45-65, “central control system 20 . . . receives the transmission from the device, and

translates the GPS coordinates to a commonly recognized location reference”, note that the GPS system inherently, determines the location of the wireless device relative to the GPS satellite, and central receiver-transmitter, hence the server is adapted to determine the location of the wireless device relative to the location of the plurality of wireless devices).

Elliot does not disclose a system for locating members of a group comprising a server accessible via a wireless network, the server adapted to **report to the wireless device the location of the wireless device relative to the location of the plurality of wireless devices.**

Elliot’s system provides call center services that may provide location information to a parent. It may also provide other actions in case of an emergency, such as the notification of authorities, or the notification of a parent in the case where a device exceeds a pre-specified threshold of movement. Elliot’s system also discloses a process of auto-notification of a device’s movement that exceeds a pre-specified threshold, and includes a capability to function as a proximity alert device.

In the same field of endeavor, Gaukel discloses an apparatus and method for electronic monitoring and tracking of individuals, which comprises a server (central control tracking station), and the server is adapted to report to the wireless device the location of the wireless device (abstract, col. 11, lines 30-43, col. 14, lines 40-60, and col. 15, lines 40-60, “Lamp 82 may be provided to alert the monitored person to an alert condition”, note that server (control station) is adapted to report to the wireless device the location of the wireless device).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Elliot by providing the server of the system of Elliot to be adapted to report to the wireless device the location of the wireless device (as suggested by

Art Unit: 2687

Gaukel) relative to the location of the plurality of wireless devices of Elliot, motivation being for the purpose of monitoring and controlling the mobility of the first wireless device by keeping the first wireless device informed of its location relative to other wireless devices and to avoid undesired traveling in the undesired direction, and to provide directions to the first wireless device about the other wireless devices in case of emergencies (e.g., if the first wireless device needs to obtain first aid supplies from one of the other wireless devices in the vicinity).

Referring to claim 21, the combination of Elliot/Gaukel disclose the system of claim 20, and further disclose the wireless device is a cell phone (Elliot, col. 4, line 52 through col. 6, line 17, “cellular communication device”, “cellular transmission system”, note that cellular phone (cellular communication device) and the cellular transmission system is used in electronic monitoring and tracking of the individuals).

Referring to claim 22, the combination of Elliot/Gaukel disclose the system of claim 21, and further disclose the wireless network is a cell phone network (Elliot, col. 4, line 52 through col. 6, line 17, “cellular communication device”, “cellular transmission system”, “cellular transmission system, such as that used for analog cellular telephone services or digital cellular telephone services”, note that a cell phone network (cellular transmission system) is used).

Referring to claim 23, the combination of Elliot/Gaukel disclose the system of claim 20, and further disclose each of the location means comprises a GPS chip adapted to acquire and process a GPS signal (Elliot, col. 5, line 47 through col. 6, line 67, “GPS device which is to be worn or carried in some manner by the person to be monitored”, note that a GPS chip (GPS device) is used to acquire and process GPS signal).

Referring to claim 24, the combination of Elliot/Gaukel disclose the system of claim 20, and inherently discloses the server is located on one of the plurality of wireless devices (Elliot, FIG. 1, and col. 4, line 52 through col. 5, line 60, “the central receiver-transmitter 16”, “central control system”, note that the server communicates with the second wireless device (the central receiver-transmitter 16), and further note that the server (central control system) may reside on a single computer, or on multiple computers in a distributed computing environment. Hence it is inherent for the server to reside on one of the plurality of the wireless devices so that one wireless device could control the other (e.g., a parent, as the server could set threshold boundaries for his child).

7. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6243039 B1, Elliot in view of U.S. Patent No. 6,100,806, Gaukel and further in view of U.S. Patent No. 5,557,259, Musa.

Referring to claim 9, the combination of Elliot/Gaukel discloses the system of claim 2. The combination of Elliot/Gaukel does not disclose the system of claim 2, **wherein the location rule comprises a proximity threshold relative to the second wireless device.**

In the same field of endeavor, Musa discloses a system to monitor the proximity of a subject under surveillance, wherein it comprises a proximity threshold between a transmitter and a receiver (abstract, and col. 1, line 48-66, “A proximity alert and direction indicator is provided that allows an observer to monitor the proximity of a subject under surveillance, particularly a child. The subject wears a transmitter removeably attached to the shoe. The observer wears a receiver-containing bracelet. The receiver contains a proximity detector with threshold set that

Art Unit: 2687

emits an audible sound when the distance between the subject and the observer exceeds some preset distance”).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Elliot/Gaukel by providing the location rule with a proximity threshold relative to the second wireless device, as suggested by Musa, motivation being for the purpose of allowing the system to know the distance between the two wireless devices, and also to prevent the wandering away of the wireless devices from each other (e.g., if the first device is attached to a child and the second device is attached to a parent, the parent could be kept aware of the separation distance between them and a proximity threshold would alert them to be aware of their proximity and take appropriate action).

Referring to claim 10, the combination of Elliot/Gaukel/Musa disclose the system of claim 9, and inherently disclose the proximity threshold relative to the second wireless device comprises a maximum allowable separation threshold (Musa, abstract, and col. 1, line 48-66, “A proximity alert and direction indicator is provided that allows an observer to monitor the proximity of a subject under surveillance, particularly a child. The subject wears a transmitter removeably attached to the shoe. The observer wears a receiver-containing bracelet. The receiver contains a proximity detector with threshold set that emits an audible sound when the distance between the subject and the observer exceeds some preset distance”, note that a proximity detector with threshold is set and it emits a sound when the distance between the transmitter and the receiver exceeds a maximum allowable separation threshold (some preset distance). Further note that a threshold value inherently has a value, which sets a boundary for the maximum allowable value).

Referring to claim 32, Elliot discloses a system for locating a member of a group (abstract, “a system that tracks . . . locations of a . . . person”, “monitors the location of a child”, “auto-notification of a device’s movement that exceeds a pre-specified threshold”, “proximity alert device”, note that a pre-specified threshold is defined and the system includes the capability to function as a proximity alert device, hence the system locates a member of a group relative to a perimeter boundary), wherein each member of the group comprises

a monitored unit equipped with location means (FIG. 1, “device worn by a child”, “central receive transmitter”, col.2, lines 27-46, and col. 4, line 35 through col. 6 line 65, 17, “a device worn or carried . . . by a person”, “The device 20 receives broadcast signals from each of three GPS satellites”, note that a first wireless device (the device 12) and a second wireless device (the central receiver-transmitter 16) are used. Further note that the first and the second devices are inherently wireless so that broadcast signals are transmitted and received), the system comprising:

the monitored unit, wherein the monitored unit is accessible via a wireless network; and a server accessible via the wireless network, the server adapted to receive location data from a first monitored unit (FIG. 1, and col. 4, line 52 through col. 5, line 59, “device worn by a child”, “central receive transmitter”, col.2, lines 27-46, and col. 4, line 35 through col. 6 line 65, 17, “a device worn or carried . . . by a person”, “The device 20 receives broadcast signals from each of three GPS satellites”, “The data signal transmitted by the device 12 generally includes the current GPS coordinates”, “The central receiver-transmitter 16 that receives the transmission from the device”, note that a first wireless device (the device 12) and a second wireless device

(the central receiver-transmitter 16) are used. Further note that the first and the second devices are inherently wireless so that broadcast signals are transmitted and received);

establish a location rule for the first monitored unit (col. 3, lines 23-40, note that “a pre-specified threshold”, hence there it inherent that a location rule was established),

determine whether the first monitored unit is in violation of the location rule established for the first monitored unit (col. 3, lines 23-65); and in the event the first monitored unit is in violation of the location rule established for the first monitored unit, report the location of the first monitored unit (col. 3, lines 23-65)).

Elliot does not specifically disclose in the event the first monitored unit is in violation of the location rule established for the first monitored unit, report the location of the first monitored unit to the first monitored unit.

Gaukel discloses in the event the first monitored unit is in violation of the location rule established for the first monitored unit, report the location of the first monitored unit **to the first monitored unit** (col. 15, lines 40-60, “alert the monitored person to an alert condition such as position violation”).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Elliot by incorporating the teachings of Gaukel into that of Elliot, and consequently providing the system of Elliot to report any violations to the first unit, which is the unit which has violated the perimeters, for the purpose of allowing the first unit (violation) to know about its positions and violations and avoid and catastrophes.

Response to Arguments

8. Applicant's arguments filed on August 22, 2005 have been fully considered but they are not persuasive.

Referring to claims 25-28, the applicant basically argues, on page 12, Elliot's network does not disclose the ad hoc network claimed by the applicant. The examiner respectfully disagrees with this argument and interpretation of Elliot's network. According to the definition, an ad hoc network a peer-to-peer network set up temporarily to meet some immediate need. Furthermore, the contents of the claims does not match the arguments made by the applicant.

In response to applicant's argument that the references fail to show certain features of applicant's invention with regards to claims 1-8, 11-24, and 29-30, it is noted that the features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

Art Unit: 2687

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred A. Casca whose telephone number is (571) 272-7918. The examiner can normally be reached from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid, can be reached on (571) 272-7922. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


10/14/05
LESTER G. KINCAID
SUPERVISORY PRIMARY EXAMINER